

## AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

### LISTING OF CLAIMS

1. (currently amended) In a microcontroller, a method of accessing a block of memory, comprising:  
  
in response to an access request to the block of memory, ascertaining a security rule associated with the block of memory;  
  
applying the security rule according to a security algorithm to determine if the access request is authorized; and  
  
denying the access request in the event the access request is unauthorized, wherein the security rule comprises one of a plurality of security levels assigned to the block of memory, the security levels corresponding to ability of the processor to read or write to the block of memory.
2. (original) The method according to claim 1, wherein the access request comprises one of a read request and a write request.
3. (original) The method according to claim 1, wherein the memory block comprises one of a plurality of memory blocks.
4. (original) The method according to claim 3, wherein the plurality of memory blocks comprise nonvolatile memory residing on the microcontroller.

5. (canceled)

6. (original) The method according to claim 1, wherein the security rule comprises one of a plurality of security levels assigned to the block of memory, the security levels defining ability of a programmer to read or write to the block of memory.

7. (original) The method according to claim 1, wherein the security rule comprises one of a plurality of security levels assigned to the block of memory, the plurality of security levels comprising levels which represent progressively greater security against unauthorized access to the block of memory.

8. (original) A microcontroller having an electronic storage medium that stores instructions which, when executed on a processor forming a part of the microcontroller, carry out a process according to claim 1.

9. (original) In a microcontroller having an internal processor, a method of accessing memory, comprising:

mapping a security level to each block of a plurality of memory blocks and storing the mapping in a table; in response to an access request to a specified block of memory, determining the security level for the specified block of memory; applying the a security algorithm using the

security level to determine if the access request is authorized by the algorithm; and denying the access request in the event the access request is unauthorized.

10. (original) The method according to claim 9, wherein the security levels comprise a plurality of levels which represent progressively greater security against unauthorized access to the block of memory.

11. (original) The method according to claim 9, wherein the plurality of memory blocks comprise nonvolatile memory residing on the microcontroller.

12. (original) The method according to claim 9, wherein the table is stored in a supervisory nonvolatile memory on the microcontroller.

13. (original) The method according to claim 9, wherein the security algorithm is stored in a supervisory read only memory on the microcontroller.

14. (currently amended) In a microcontroller, a method of controlling secure access to memory, comprising:

in response to a request to change a security rule for a block of memory, determining if the change in the security rule for the block of memory is authorized; and

denying the request in the event the request is unauthorized, wherein the security rule comprises one of a plurality of security levels assigned to the block of memory.

15. (original) The method according to claim 14, wherein the determining comprises authorizing the request to change the security rule if the request comprises a request to increase the security of the block of memory.

16. (canceled)

17. (original) A microcontroller having an electronic storage medium that stores instructions which, when executed on a processor forming a part of the microcontroller, carry out a process according to claim 14.